Langford Broadcast Group (LBG) requests the Federal Communications Commission look into altering rule 74.1204 concerning spacing and second adjacency channel waivers for licensing of FM fill-in translators. We believe the request to modify antenna construction to comply with wavier requirements is burdensome and not required concerning the current state of radio receiver performance.
FM translators operate with a power limitation of 250 watts effective radiated power. Many applications for construction permits request waivers from 74.1204. These wavier requests show how using multi-bay antennas or directional antennas can alleviate any interference that would affect radios in areas where the overlap might cause listening issues to the protected station station in inhabited structures.

LBG believes this rule is based on outdated information and places a burden on broadcasters that can limit the ability to serve the public by making engineering and construction much more costly than a simple single or two bay system when in fact no interference would be received based on outdated contour requirements. Current contour protection dates back decades. Back in the 1960's FM radio performance was poor. The front ends of these radios were broad the radios were susceptible to overload and weak stations were wiped out by stronger signals two or three channels away.

Modern FM radios exhibit much improved front ends that have much better selectivity and are much more immune to overload. We believe the current state of the art in receivers should have a bearing on enforcement of these outdated requirements. Radios made in this century have much better rejection of second and third adjacent frequencies and have no trouble providing excellent reception in areas that would currently show prohibited overlap. As an example we have used a cheap 13 dollar portable Amazon purchased FM radio with only its built in antenna and have been able to receive a 250 watt translator almost 20 miles away while listening from the tower site of our own translator two channels away from the distant signal.

In many cases FM translator applicants have had to use elaborate antenna systems to avoid overlap of one of two single family homes in remote areas when a simple test would show that receivers in these homes did not need such protection. Or the use of directional antennas to shiled one or two homes and stop service to large areas past those few structures.Further LBG believes that modification or elimination of the second adjacency rule can be done without any loss of regulatory protection. Rule 74.1203 in our opinion supersedes rule 74.1204 in that it provides that any ***actual interference*** found to occur from operation of a translator requires the shut down of said translator until a method is

found to remediate the issue. Further, rule 74.1203 covers interference to ANY broadcast station, not just a station on the second adjacent frequencies. Therefore we believe that 74.1203 is a more practical and efficient regulation concerning translator interference near the tower site.

The requirement that an applicant show no radiation in the prohibited area where buildings are located is extremely costly and in most cases may not even be necessary. AM operators are already at a financial disadvantage in just keeping AM stations on the air especially directional stations with all the current regulatory requirements. The cost of construction of a simple FM translator for an AM station is blown away if one must have a wavier study and then find that as many as five bays must be installed at high elevation in the most expensive part of the tower taking up about 50 feet of tower space making the rental cost of a non owned tower much more expensive as the area around the bays must not have any other antennas in operation. This can raise tower rent by a factor of ten! Or even preclude construction as no adequate space may exist for so many bays needed to curtail downward radiation.

Commission resources would also be better used on processing applications rather than reviewing wavier requests that are not necessary if current radio performance is taken into account.

As further background, the FCC has over the years modified its rules based on the state of broadcasting equipment as a regular part of the review process. For example in the 1960s AM stations were still required to have transmitter measurements entered in manual logs every 30 minutes on Plate Current Plate Voltage, RF line current and tower phase and ratio readouts. In fact some directional stations required a licensed engineer to be at the transmitter site full time! Requirements also called for operation of frequency monitors and modulation monitors at all sites. As transmitters became more stable and audio processors more reliable these requirements were dropped and total remote operation by unlicensed staff became the law of the land. Broadcasters were still required to adhere to the same transmission standards but were allowed to make sure those standards were maintained by alternate means. LBG believes decades of receiver improvement has negated the need for such tight overlap prohibitions when it comes to translators operating in such a low power range.

If interference complaints occur after construction rule 74.1203 is still the overarching protection.

Larry Langford
President